

SUPPORT FOR THE AMENDMENTS

Claims 33-34, 36-41 and 43-51 are herein canceled. Applicants make no statement with respect to the propriety for the rejection of these claims and preserve the right to present the rejected claims in a continuation application without prejudice.

Support for the amendment of Claim 35 is found in original Claim 33.

Support for the amendment of Claim 42 is found in Claim 36 and on page 23, lines 1-6, in the specification.

Support for the amendment of Claim 52 is found in Claim 36.

Support for the amendment of Claim 55 is found in Claim 43.

Support for the amendment of Claim 56 is found in Claim 43.

Support for the amendment of Claim 57 is found in Claim 43.

No new matter is believed added to this application by entry of this amendment.

Claims 35, 42 and 52-61 are active.

REMARKS/ARGUMENTS

The claimed invention provides methods to prepare a polarizing electrode for an electrical double layer capacitor containing an activated carbon having an alkali metal content less than 60 ppm and/or a heavy metal content of less than 20 ppm as described in Claims 35, 42, 52, 55, 56 and 57, and claims dependent thereon.

Applicants wish to thank Examiner McCracken for the withdrawal of the Restriction requirement and for the indication that Claims 35 and 55-61 are allowed. Applicants note that Claims 33-34, 36-41 and 43-51 are herein canceled and Claims 35, 42, 52, 56 and 57 are rewritten in independent form including all the description of the canceled claims from which they depended.

The rejection of Claims 33-34, 36-41 and 43-51 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) over Nakamura et al. (Influence of physical properties of activated carbons on characteristics of electrical double-layer capacitors; J. Power Sources; 60 (1996) 225-231) is rendered moot in view of the cancellation of Claims 33-34, 36-41 and 43-51 herein.

The rejection of Claim 43 under 35 U.S.C. 112, first paragraph is rendered moot in view of the cancelation of Claim 43, herein. Applicant respectfully note that the description of Claim 43 has been added to amended Claims 55, 56 and 57. Applicants also respectfully point to page 27, lines 10-17, in support of the claim language of 200 ppm or less. The cited description reads:

... Furthermore, in the activated carbon of the third invention of the present application, the alkali metal content is 200 ppm or less. The reason for this is as follows: specifically, if the alkali metal content exceeds 200 ppm, leakage current is increased and the charging efficiency drops, so that the energy efficiency is poor, and a rate of self-discharge retention is low.

Applicants respectfully submit that the description “200 ppm or less” is supported in the specification as filed and therefore, Claims 55, 56 and 57 are fully supported.

The rejection of Claims 52-54 under 35 U.S.C. 102(b) over Oyama et al. (U.S. 5,891,822) is respectfully traversed.

Oyama describes a process for producing active carbon comprising calcining an easily graphitizable organic substance and subjecting the calcined material to alkali activation. Two alkali treatment temperature ranges are described (Abstract).

The Office has cited the description of Example 1 (Official Action dated April 1, 2009, page 9, line 8) as showing washing activated carbon with acid. However, Applicants respectfully note that Claim 52 recites:

washing the alkali activation treatment product thus obtained with an acidic aqueous solution **comprising an oxidizing agent** to give an activated carbon. (Bold added for emphasis)

Applicants respectfully submit that nowhere does Oyama disclose or suggest an acidic wash containing an oxidizing agent as according to Claim 52.

Applicants respectfully submit that a proper finding of anticipation requires that “[e]very element of the claimed invention … be literally present, arranged as in the claim. *Perkin-Elmer Corp.*, 732 F.2d at 894, 221 USPQ at 673; *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 771-72, 218 USPQ 781, 789 (Fed. Cir. 1983), *cert. denied*, 465 U.S. 1026 [224 USPQ 520] (1984). The identical invention must be described in as complete detail in the reference as is described in the claimed invention.

As Oyama does not disclose or suggest an acidic wash containing an oxidizing agent, this reference cannot anticipate nor render obvious Claim 52, as presently described. Accordingly, withdrawal of the rejection of Claims 52-54 under 35 U.S.C. 102(b) over Oyama et al. (U.S. 5,891,822) is respectfully requested.

The rejection of Claims 52-54 under 35 U.S.C. 102(b) or in the alternative, under 103(a) over Oyama et al. (U.S. 5,891,822) is respectfully traversed.

The deficiency of the cited reference to disclose or suggest an oxidizing agent in the acidic wash is described above. Applicants respectfully submit that Oyama would have provided no motivation to one of ordinary skill in the art, at the time of the present invention, to use acid containing an oxidizing agent. Moreover, this reference fails to disclose or suggest that the significant improvement in quality with respect to lower heavy metal content shown in Table 3 (Examples C-1 and C-2) would be obtained by the method according to Claim 52.

Applicants respectfully call the Examiner’s attention to the following excerpt from the Office’s own discussion of “**Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.***”

“The rationale to support a conclusion that the claim would have been obvious is that **all the claimed elements were known in the prior art** and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention.<sup>43</sup> “[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”<sup>44</sup> **If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art,”** (Federal Register, Vol. 72, No. 195, page 57529) (**Bold added**)

Applicants submit that Oyama does not disclose or suggest an acidic wash containing an oxidizing agent and therefore does not provide knowledge of all the claimed elements. Therefore, according to the KSR guidelines above, a conclusion of obviousness cannot be supported. Accordingly, withdrawal of the rejection of Claims 52-54 under 35 U.S.C. 102(b) or in the alternative, under 103(a) over Oyama et al. (U.S. 5,891,822) is respectfully requested.

The rejection of Claim 42 under 35 U.S.C. 103(a) over Oyama in view of Berl (U.S. 2,567,468) is respectfully traversed.

Applicants note that Claim 42 is herein amended to recite:

... washing the alkali activation treatment product thus obtained with a liquid comprising a basic substance, and  
washing the obtained basic substance washed product with  
hydrochloric acid to give an activated carbon, . . .

Oyama as described above is cited to show alkali activation of vinyl chloride resin and subsequent incorporation into an electrode.

Berl is cited to show washing activated carbons with ammonia (Official Action dated April 1, 2009, page 11, lines 7-9).

Berl describes the manufacture of activated carbon from water-soluble acid sludges from oil refineries. Nowhere does this reference disclose or suggest the wash sequence presently described in Claim 42 as shown above.

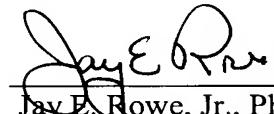
In contrast, neither cited reference discloses or suggests the specific sequence presently recited in Claim 42 as stated above. Moreover, neither reference alone or in combination suggests the improved quality of the electrical double layer capacitor shown in Table 2 (Examples B1 and B2) of the specification.

In view of all the above, Applicants submit that the cited combination of references cannot render the claimed invention obvious and withdrawal of the rejection of Claim 42 under 35 U.S.C. 103(a) over Oyama in view of Berl (U.S. 2,567,468) is respectfully requested.

Applicants respectfully submit that the above-identified application is now in condition for allowance and early notice of such action is earnestly solicited. Applicants further respectfully request that the withdrawn claims which depend from the allowed claims be rejoined (MPEP § 821.04).

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

  
\_\_\_\_\_  
Jay F. Rowe, Jr., Ph.D.  
Registration No. 58,948

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)